

Appl. No. : 10/009,916  
Filed : August 13, 2002

## REMARKS

The changes made to the Claims by the current amendment, including ~~deletions~~ and additions, are shown herein with deletions designated with a strikethrough and additions underlined. No new matter has been added herewith.

### Compliance under 35 U.S.C. §112, first paragraph – Written Description

Claims 1-4, 6-8, 10-11, 17-22, 25-26 and 50-56 were rejected under the written description guidelines. The Examiner “understands that the specification discloses the SEQ ID NO: 1 and therefore, applicants are in possession of an isolated polypeptide comprising the amino acid sequence of SEQ ID NO: 1”. The claims have now been limited to SEQ ID NO:1, which is believed to be “the amino acid sequence encoded by the SodC-encoding nucleotide sequence of pALK14 (ATCC 207155),” as recited in some of the claims. Thus, Applicants believe that the claims are in compliance with the written description guidelines of U.S.C. §112, first paragraph and respectfully request withdrawal of the rejection.

### Compliance under 35 U.S.C. §112, first paragraph – Enablement

Claims 1-4, 6-8, 10-11, 17-23, 25-26, 49 and 50-57 were rejected as not being enabled by the specification. As described above, reference in the claims to variants of the *Lawsonia spp.* SodC polypeptide have been removed, and claims now refer to polypeptide comprising the amino acid sequence set forth in SEQ ID NO: 1 of a *Lawsonia spp.* SodC polypeptide or the amino acid sequence encoded by the SodC-encoding nucleotide sequence of pALK14 (ATCC 207155). Thus, Applicants believe that the claims are incompliance with the enablement guidelines of U.S.C. §112, first paragraph and respectfully request withdrawal of the rejection.

### Rejection under 35 U.S.C. §102(b)

The Examiner rejected Claims 1-4, 6-8, 10-11, 13, 14, 17-26, 49 and 50-57 as anticipated by McOrist et al. Infect. Immun. 1989 March; 57 (3):957-962. The Examiner states that the protein profiles of *Campylobacter* like organisms shown in Figure 1 on page 959 of McOrist et al. contain minor components between 20kD-40kD including two distinct bands at 25 kD and 27 kD. The Examiner believes that these proteins are the same as the *Lawsonia spp.* SodC

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polypeptide of the claimed invention because the 25 kD band is within 5 kD of the molecular weight of the polypeptide of SEQ ID NO:1. However, the actual molecular weight of the polypeptide of SEQ ID NO:1 is about 19 kD, which is more than 5 kD different from the band shown in the reference. Nothing in the reference would lead of one of skill in the art to believe that either the 25 kD or the 27 kD bands are the same protein as presently claimed. Accordingly, withdrawal of the present rejection is respectfully requested.

**Conclusion**

Applicants believe that the current amendments place the application in condition for allowance. Should there be any questions which might result in a delay in allowance, the examiner is respectfully requested to contact the undersigned at the telephone number appearing below. Please charge any additional fees, including any fees for additional extension of time, or credit overpayment to Deposit Account No. 11-1410.

Respectfully submitted,

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